BEFORE THE

Federal Communications Commission

WASHINGTON, D.C. 20554

In the Matter of	)	
	)	
Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them	)	**PR Docket No. 92-235**

To: The Commission

COMMENTS
OF
SOUTHERN CALIFORNIA EDISON COMPANY

Southern California Edison Company ("SCE"), by its attorneys and pursuant to Section 1.415 of the rules and regulations of the Federal Communications Commission ("FCC" or "Commission"), hereby submits these Comments in response to the Commission's Notice of Proposed Rule Making ("Notice" or "NPRM") released in the above-captioned proceeding on November 6, 1992.

Preliminary Statement

1. SCE is the nation's second largest electric utility. Its service area stretches from Los Angeles, California, east to the Arizona border, and north to the Bridgeport, California, area. Within this 50,000 square mile expanse, SCE serves over four million residences, schools, hospitals, businesses, and government facilities.

In total, SCE provides electricity to approximately nine million people, or almost one in every 29 persons in the United States.

2. To ensure that service is provided safely and efficiently to all of its customers, SCE relies heavily on its telecommunications network. SCE extensively employs private wire and fiber lines, the public switched telephone network, microwave facilities, and private land mobile radio. While each of the telecommunications elements is critical, SCE's land mobile network is perhaps most important in enabling SCE to meet its enormous public service obligations. Land mobile communications are indispensable to customer service and to the maintenance, repair and emergency preparedness activities associated with SCE's distribution system, its generating plants, and its major transmission lines.

3. Because the scope of this rule making proceeding is so broad, it will affect every aspect of SCE's land mobile radio operations. SCE's operations take place in one of the most spectrum-congested areas of the country, so SCE understands the need for long term efforts to encourage a migration to more spectrum efficient technology. Having reviewed the major position papers already submitted

in this proceeding by the Land Mobile Communications Council and the National Association of Business and Educational Radio, SCE is confident that the Commission will have all of the facts and arguments before it to enable the Commission to reach a proper balance between the need to expand spectrum capacity and the financial impact on incumbent licensees.

4. Therefore, in these comments, SCE will focus on its radio systems which operate on frequencies that have been set aside for telemetry use. These systems already use narrow band equipment. Although they operate on land mobile frequencies, these systems are not land mobile in nature. In the Notice the Commission has proposed to preserve these systems in their present form and power, a proposal which SCE supports. In these comments, SCE will point out apparent oversights in the NPRM, which must be remedied if the use of the telemetry frequencies is to remain unimpaired.

Load Management in a Nutshell

5. "Load management" is a shorthand reference for radio-based, interactive systems that monitor and regulate customers' demands for electric power. By means of radio

receivers that are attached to customers' major power-using appliances, principally air conditioners and water pumps, SCE can reduce an individual customer's consumption of electricity during periods of peak demand. Similarly, large, commercial customers which have access to alternative sources of power, can be switched over to their alternatives during periods of peak demand.

6. Load management is a vital tool for controlling rate payer costs. Load management is a way in which peak load demands can be met and controlled without costly construction of additional generating capacity. Without load management programs, the utility would be forced to construct additional generating capacity in order to meet peak load demands. During non-peak periods, this generating capacity would sit idle, although the rate payers would have to absorb the fixed costs associated with it. In other words, load management is a way in which the demand peaks can be smoothed out and the costs of new construction can be minimized.

7. Load management programs have been successfully implemented in Southern California. Today there are 153,000 residential customers whose air conditioners are regulated by radio by SCE. The number is growing at a rate of 18,000

per year. There are 420 agricultural or municipal customers whose water pumps are regulated by radio by SCE. The number increases by about 15 customers per year. There are 600 large, commercial customers whose power supply is similarly

Telemetry Frequencies Are Already Spectrum Efficient

9. SCE's load management system and SCADA system operate on frequencies that the Commission has set aside for telemetry operations. SCE operates 21 radio transmitters throughout its 50,000 square mile service area to control the thousands of pieces of demand-regulating equipment now in the field. In addition, SCE operates 18 radio transmitters as part of its SCADA system

the list would hardly be noticed, while adding this frequency to the list would have major consequences for the users of the adjacent telemetry frequency. Accordingly, SCE strongly urges the Commission to delete the frequency 173.3600 MHz from the proposed tables of available frequencies, found at §§88.617 and 88.1501.

12. Significantly, the authorized bandwidth of telemetry systems is already 6 kHz for 12 of the channels and 3 kHz for 2 of the channels. (See, §90.63(d)(7) and (12).) Thus, the telemetry frequencies already comply with the goals the Commission is attempting to achieve in this proceeding and there is no need to include these frequencies in the debate about how best to encourage a migration to 6.25 kHz or 5 kHz equipment in these bands.

The Maximum Power of Telemetry Frequencies Should Be Maintained

13. It is imperative that the authorized power of the telemetry frequencies, which are used for load management and SCADA systems, remain at present levels. These frequencies are not used for mobile operations. Thus, the objective of the Commission's proposed power limitations, which would apply generally to mobile

operations in this band, would not be advanced by reducing the power levels for telemetry operations.

14. From an operational standpoint, the existing power levels are absolutely essential. The radio receivers that are attached to outdoor air conditioner units, for example, are often mounted less than one foot above ground. Thus, the power at the base station must remain at current levels in order to continue the utility's ability to access these receivers.

15. While, in general, the Notice proposes to grandfather the telemetry frequencies and their operating parameters, SCE notes that there is an unexplained power reduction being proposed in the Notice for 5 of those frequencies. With the exception of the frequency 154.46375 MHz, which, under §88.1295(d) would remain at 300 watts output power,1/ the other 13 telemetry frequencies would be limited to 20 watts ERP maximum power for fixed stations

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1/ In the NPRM, the Commission has proposed to retain the frequency limitations, now found in §90.63(d)(6), in new §88.1295(d). However, the frequency referenced in proposed §88.1295(d), 154.43275 MHz, is incorrect. The frequency should be 154.46375 MHz. This is the high-power (300 w) frequency used by power utilities for peak load shaving and shedding in a multiple address configuration. SCE recommends that proposed §88.1295(d) be corrected to specify the frequency 154.46375 MHz, as shown in paragraph 16 of these comments.

under §88.1295(c). For eight of those thirteen frequencies, the 20 watts ERP maximum is the same as now provided for under §90.63(d)(23). However, for five of those thirteen frequencies, §90.63(d)(11) currently permits a maximum output power of 50 watts for fixed stations.

16. This reduction in maximum permissible power from 50 watts output power to 20 watts ERP is not warranted in light of the operational requirements explained above. Nor has it been explained or justified by the Commission in the NPRM. SCE's 18 SCADA transmitters, which operate on the frequency 173.39 MHz, would be adversely impacted by this apparent oversight. Accordingly, SCE strongly recommends the following changes to §88.1295:

§ 88.1295 Telemetry in the 154 MHz and 173 MHz bands.

* * *

(c) **Power and antenna height restrictions applicable to the frequencies 154.45625, 154.47875, 173.2375, 173.2625, 173.2875, 173.3125, 173.3373 and 173.3625 MHz.** [Text as originally proposed.]

(d) **Power restrictions applicable to the frequencies 154.47125, 173.20375, 173.2100, 173.3900 and 173.39625 MHz.** Maximum output power of the transmitter may not exceed 50 watts for fixed stations and 1 watt for mobiles. A1A, A1D, A2B, A2D, F1B, F1D, F2B, F2D, G1B,

Proposed subsection (d) would be redesignated (e) and the frequency corrected, as follows:

> (e) **Multiple Address Use of 154.46375 MHz.** The frequency 154.46375 is also ....[continue with text as proposed.]

Conclusion

17. Implementation of the revisions urged in these comments would accomplish the transfer of the VHF telemetry channels from Part 90 to Part 88 without alteration of the present parameters. This appears to have been the intent of the Commission and it is absolutely necessary for the continued operation of SCE's load management and SCADA radio systems.

Respectfully submitted,

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